

Mid Term Project Term



Session: 2020 – 2024

Submitted by:

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1.1 Acknowledgement

By the will of Allah Almighty, i was able to complete my project before the deadline. I tried my very best to work day and night for the fulfillment of this project. Moreover, few of my friends helped and motivated me to complete this project. Moiz-ul-Haq helped me to understand dictionary data structure and its operations, Kashir also told me to add some more better validations on some operations and with the efforts of Mr. Nazeef-Ul-Haq i was able to complete my project. Without their help i wouldn't be able to complete my project with efficiency.

1.2 Introduction

This project is aimed to develop such a system that manages the student data, attendance , create different assessments and generate their reports. This project will be helpful for teachers to maintain information of students and different assessments, clos. There are 5 options. Manage Student, Manage CLO, Manage Rubric and their levels , Manage Assessments and their components and generate reports. In manage student option, user can add student,can add their date wise attendance,add class attendance date and generate student result according to the assessments he/she has attempted.User can update delete these all informations. In Manage Clo, user will add clo and its details and can update and delete these Clos. In Manage rubric option, user can add multiple rubrics of selected clo and assign these rubrics different measurement levels. In manage assessment, user will add assessments and assign its components different marks.In generate report, user will select given reports and it will be generated.

1.3 Motivation of the project

To make it more easy and reliable for teacher to manage student information and assessments information and also to make information storage more efficient.

1.4 Level of impact

This system will help teacher to organize student information,their result,attendance,clo's and assessments information more efficiently.

1.5 Project File Structure

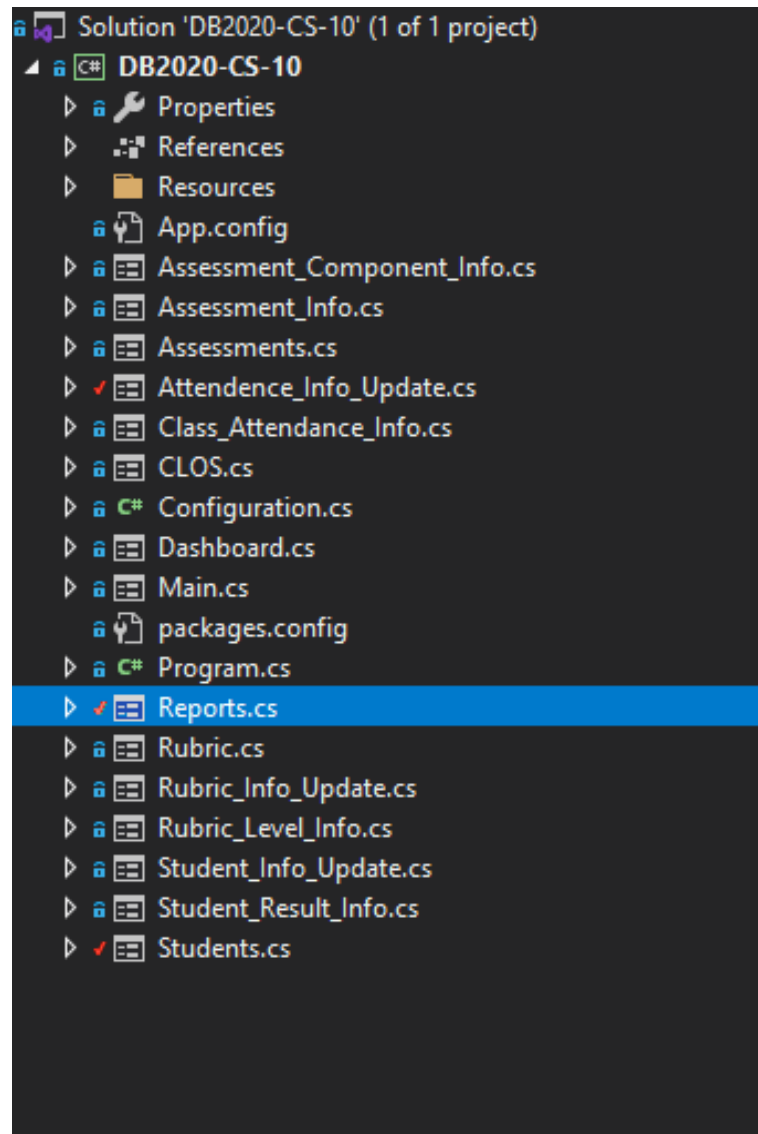


FIGURE 1.1: Project File Structure

1.6 Date of last commit

06-March-2022

1.7 GitLab Commits

Name	Reg. No	No. Of Commits
Asad Mehmood	2020-CS-10	10

1.8 GitLab Repository Link

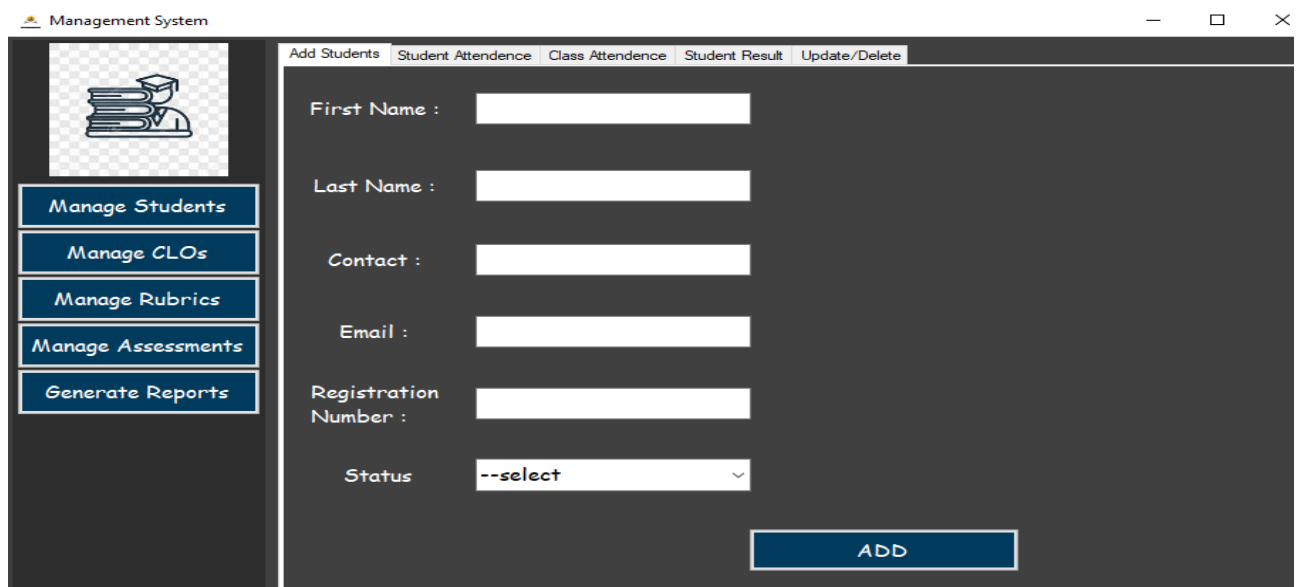
<https://gitlab.com/asadmeh1437/db2020-cs-10>

1.9 List of features

Options	Features
Manage Students	Add Student
	Student Attendance
	Class Attendance
	Student Result
	Update/Delete
Manage Clo	Add Clo
	Update/Delete
Manage Rubrics	Add Rubrics
	Add rubric level
	Update/Delete
Manage Assessment	Add Assessment
	Assessment Component
	Update/Delete
Generate Report	PDF Report

1.10 UI

1.10.1 Add Student(Manage Student)



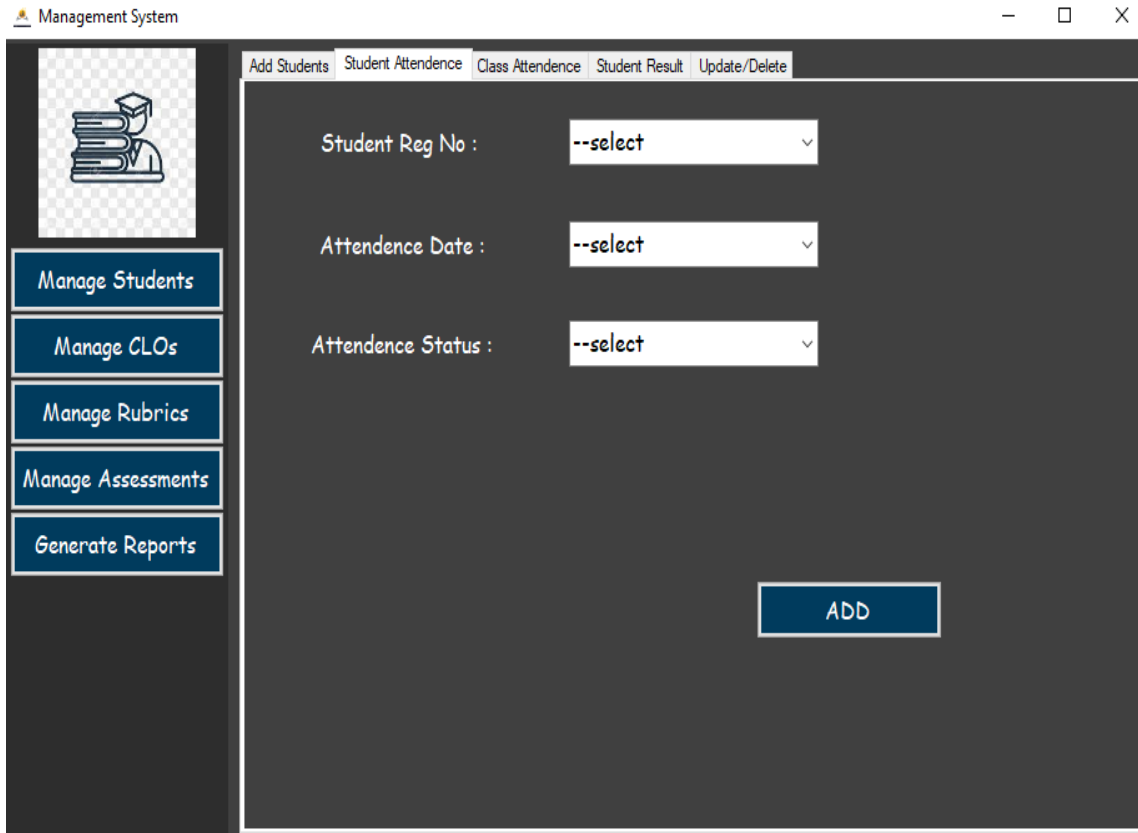
The screenshot shows a web application window titled "Management System". On the left is a sidebar with a logo of a stack of books and a graduation cap, and five menu items: "Manage Students", "Manage CLOs", "Manage Rubrics", "Manage Assessments", and "Generate Reports". The main area has a tabbed interface with tabs for "Add Students", "Student Attendance", "Class Attendance", "Student Result", and "Update/Delete". The "Add Students" tab is active, displaying a form with the following fields: "First Name :", "Last Name :", "Contact :", "Email :", "Registration Number :", and "Status" (a dropdown menu with "--select" as the current value). An "ADD" button is located at the bottom right of the form.

FIGURE 1.2: Add Student(Manage Student)

1.10.2 Description

In this page, user enter first name, last name, contact, email, registration number and status and store it in AddStudent table

1.10.3 Student Attendance (Manage Student)



The screenshot displays a web application window titled "Management System". The interface features a sidebar on the left with a logo of a person reading and five menu items: "Manage Students", "Manage CLOs", "Manage Rubrics", "Manage Assessments", and "Generate Reports". The main content area has a top navigation bar with tabs: "Add Students", "Student Attendance" (which is active), "Class Attendance", "Student Result", and "Update/Delete". Below the tabs, there are three dropdown menus labeled "Student Reg No :", "Attendance Date :", and "Attendance Status :", each with a "--select" placeholder. At the bottom right of the main area is a blue "ADD" button.

FIGURE 1.3: Student Attendance (Manage Student)

1.10.4 Description

In this page, student reg. no whose status is active load in combo box , attendance date load in that combo box and attendance status is taken. In this page, if student attendance at taken date is present in table then it show validation that attendance already exist.

1.10.5 Class Attendance (Manage Student)

Management System

Class Attendance

Sunday, March 6, 2022

ADD

Manage Students

Manage CLOs

Manage Rubrics

Manage Assessments

Generate Reports

FIGURE 1.4: Student Attendance (Manage Student)

1.10.6 Description

In this page, date is taken and its id and date is stored in ClassAttendance table.

1.10.7 Student Result (Manage Student)

Management System

Student Result

Student ID : --select

Assessment Component ID : --select

Rubric Measurement ID : --select

Evaluation Date : Sunday, March 6, 2022

ADD

Manage Students

Manage CLOs

Manage Rubrics

Manage Assessments

Generate Reports

FIGURE 1.5: Student Result(Manage Student)

1.10.8 Update/Delete (Manage Student)

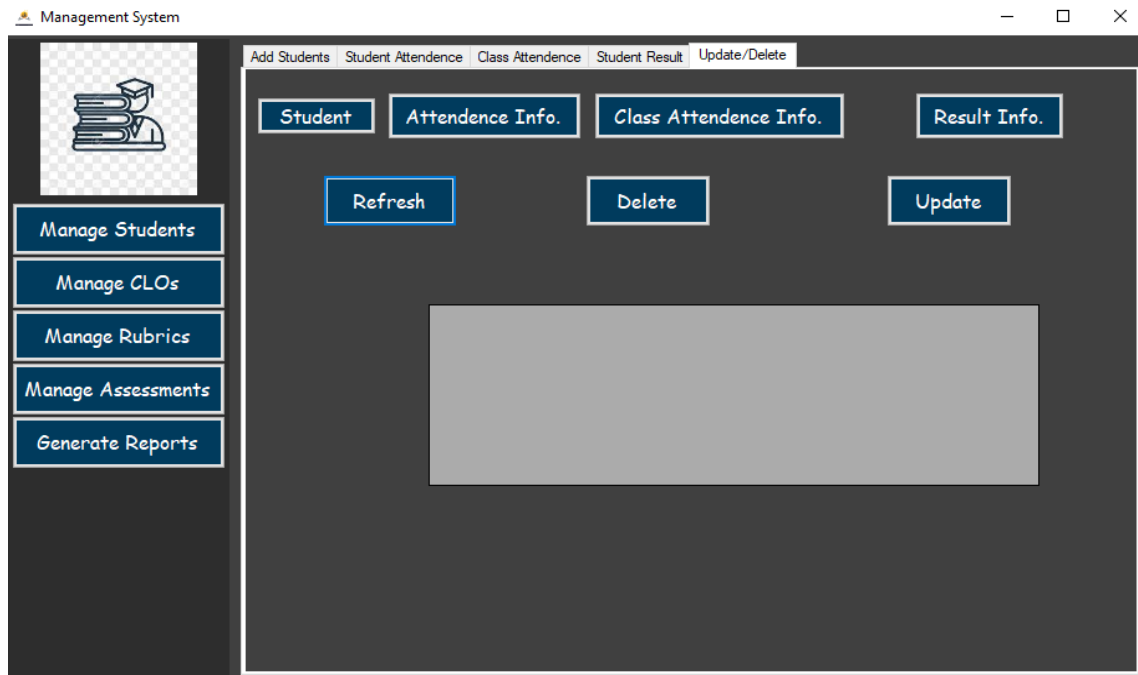


FIGURE 1.6: Update/Delete(Manage Student)

1.10.9 Description

In this page, CRUD are performed on student, attendance info, class attendance info. and student result.

1.10.10 Add Clo(Manage Clo)

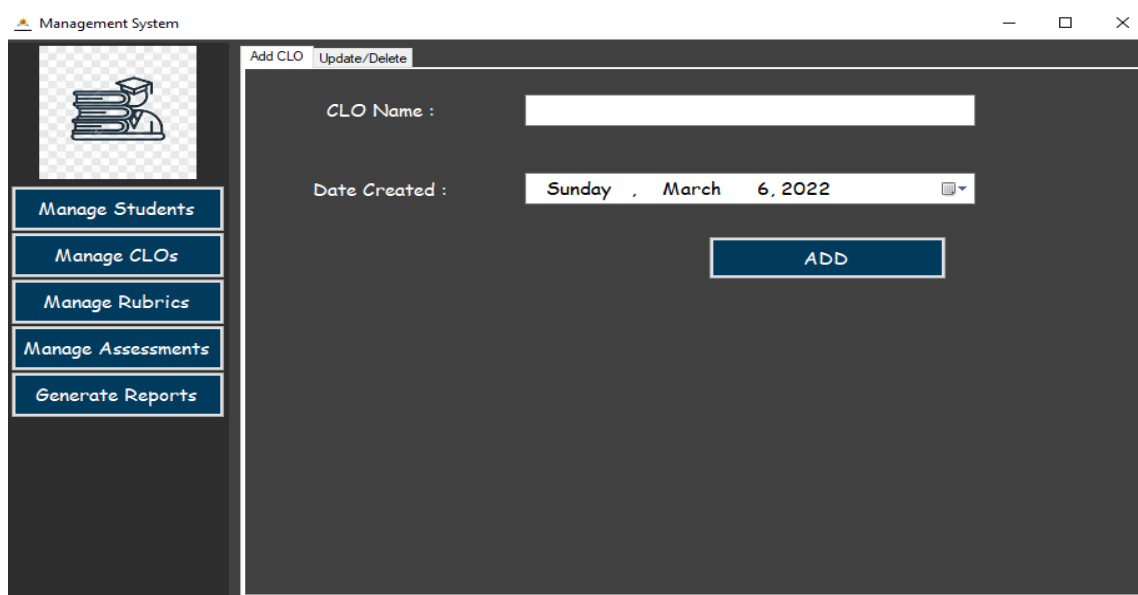


FIGURE 1.7: Add Clo(Manage Clo)

1.10.11 Update/Delete(Manage Clo)



FIGURE 1.8: Update/Delete(Manage Clo)

1.10.12 Description

In this page, CRUD are performed on clo details. If we delete clo, firstly it delete it from student result, then assessment component and rubric level and then from rubric and then from clo,

1.10.13 Add Rubric(Manage Rubric)

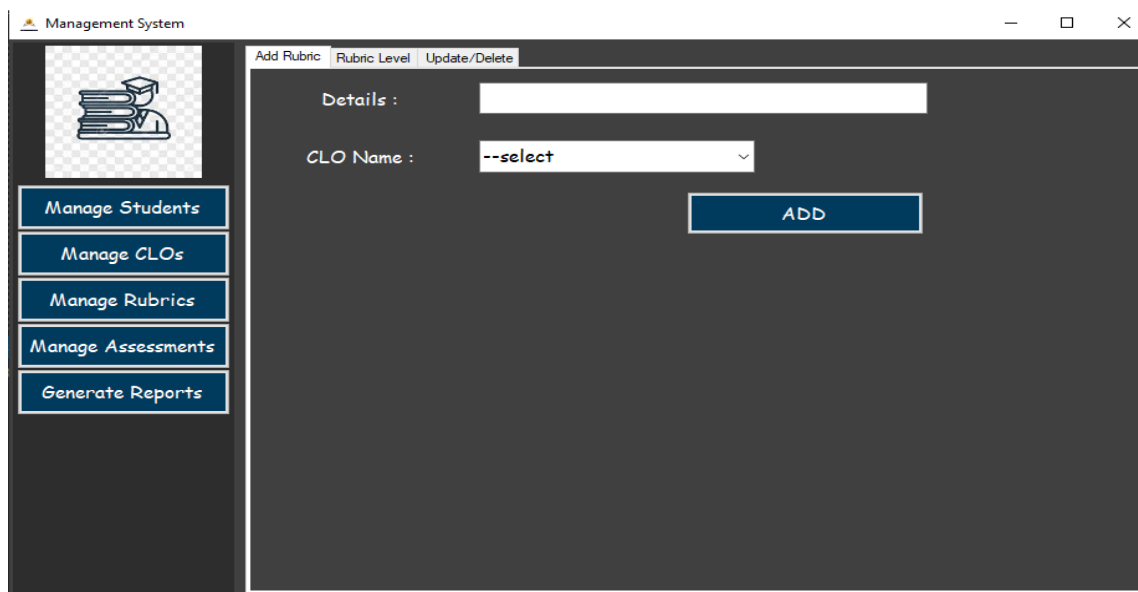
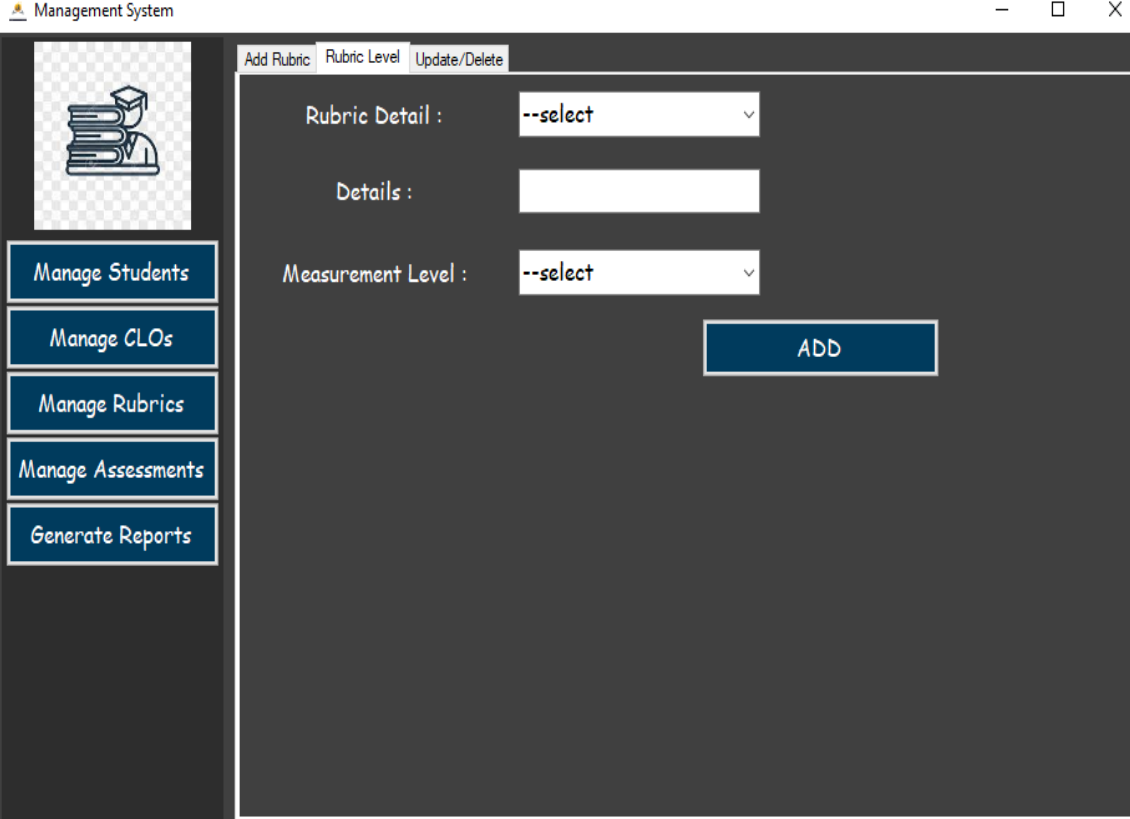


FIGURE 1.9: Add Rubric(Manage Rubric)

1.10.14 Description

In this page, a clo can get multiple rubrics so a clo will be taken and rubric will be assigned to that clo.

1.10.15 Add Rubric Level (Manage Rubric)



The screenshot shows a web application window titled "Management System". On the left is a sidebar with a logo of a person reading and five buttons: "Manage Students", "Manage CLOs", "Manage Rubrics", "Manage Assessments", and "Generate Reports". The main area has three tabs: "Add Rubric", "Rubric Level", and "Update/Delete". The "Rubric Level" tab is active. It contains three form fields: "Rubric Detail :" with a dropdown menu showing "--select", "Details :" with a text input field, and "Measurement Level :" with a dropdown menu showing "--select". An "ADD" button is positioned to the right of the "Measurement Level" field.

FIGURE 1.10: Add Rubric(Manage Rubric)

1.10.16 Description

In this page, rubric level will be assigned to that selected rubric.

1.10.17 Update/Delete (Manage Rubric)

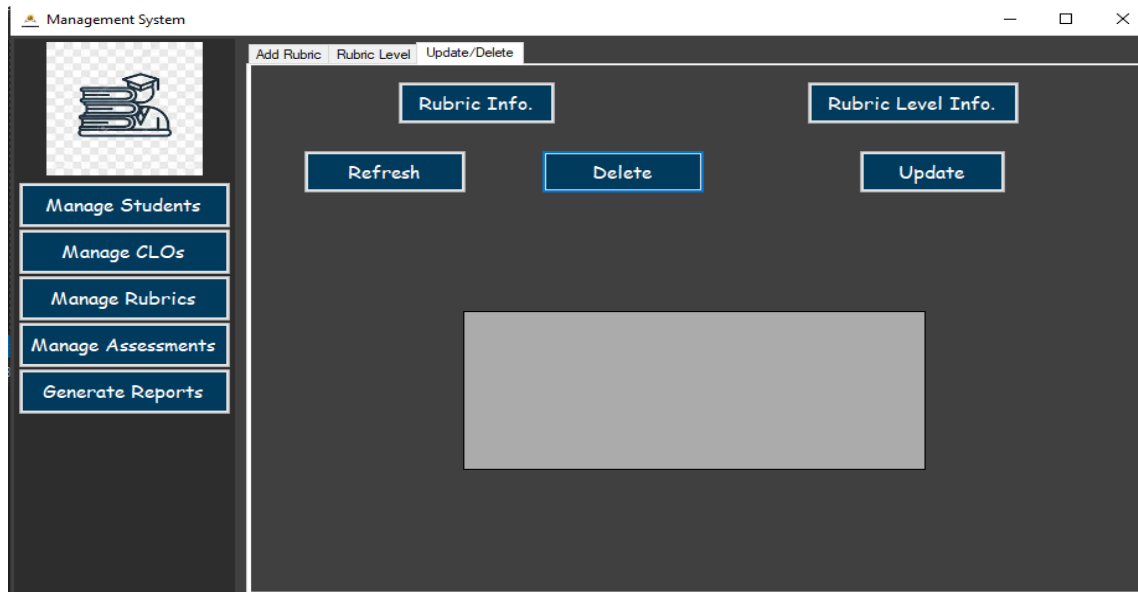


FIGURE 1.11: Update/Delete (Manage Rubric)

1.10.18 Description

In this page, CRUD are performed on Rubric and rubric level. If we delete rubric, it first delete from student result then from assessment component and rubric level

1.10.19 Add Assessment (Manage Assessment)

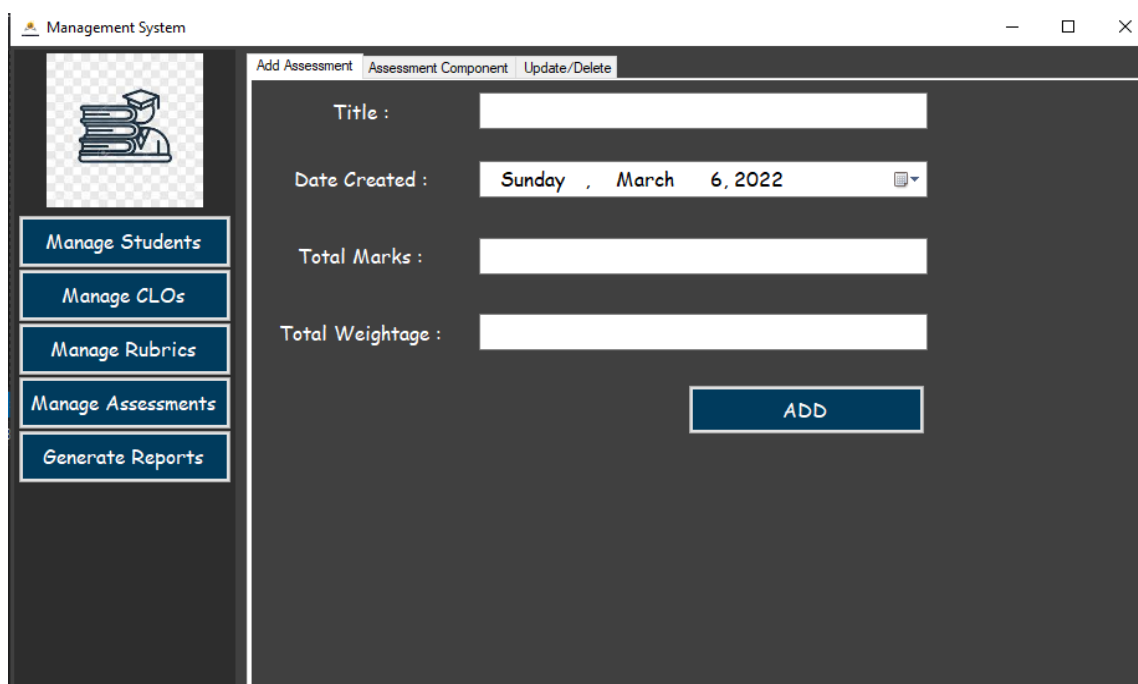
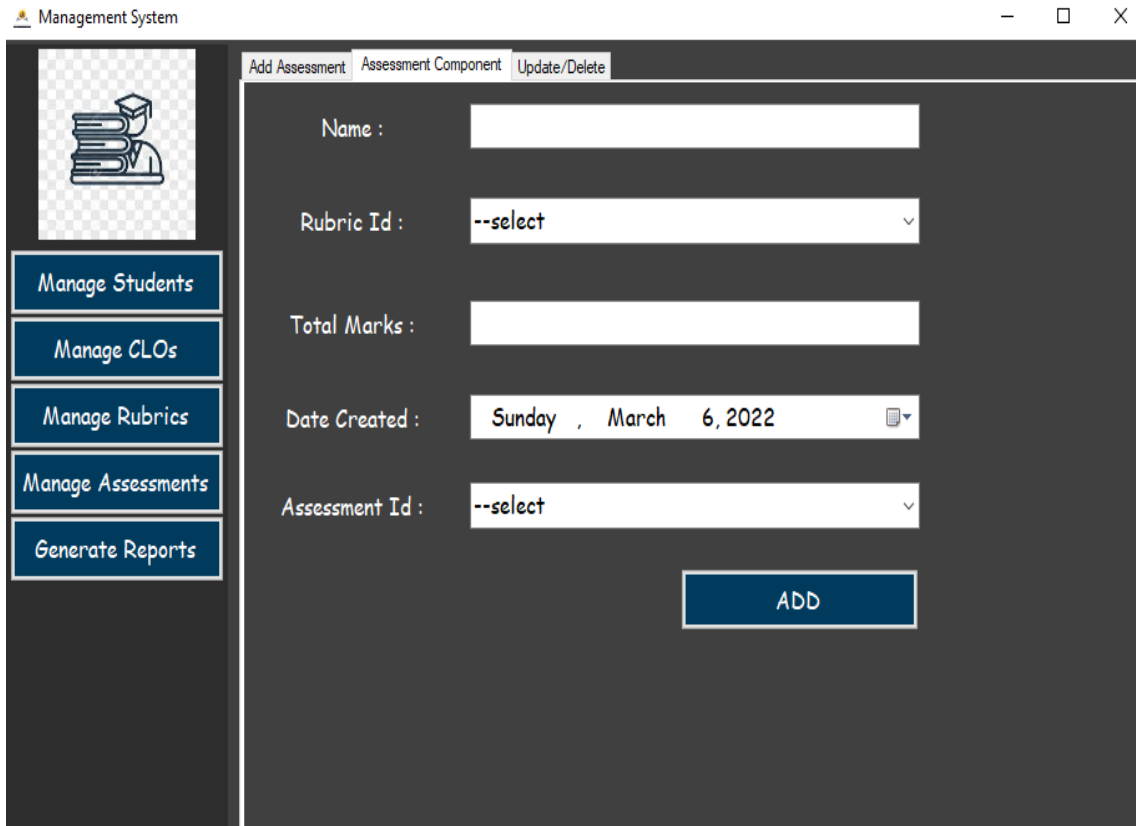


FIGURE 1.12: Add Assessment (Manage Assessment)

1.10.20 Description

In this page, we will add assessment and total marks and it will be stored in Assessment table.

1.10.21 Add Assessment Component(Manage Assessment)



The screenshot shows a web application window titled "Management System". On the left is a sidebar with a logo of a stack of books and a graduation cap, and five navigation buttons: "Manage Students", "Manage CLOs", "Manage Rubrics", "Manage Assessments", and "Generate Reports". The main content area has three tabs: "Add Assessment", "Assessment Component", and "Update/Delete". The "Assessment Component" tab is active, displaying a form with the following fields:

- Name :
- Rubric Id :
- Total Marks :
- Date Created :
- Assessment Id :

An "ADD" button is located at the bottom right of the form.

FIGURE 1.13: Add Assessment Component(Manage Assessment)

1.10.22 Description

In this page, assessment will be selected and its components with their marks are assigned. If component marks exceed assessment marks, it shows an error of you have exceeded assessment marks.

1.10.23 Update/Delete(Manage Assessment)

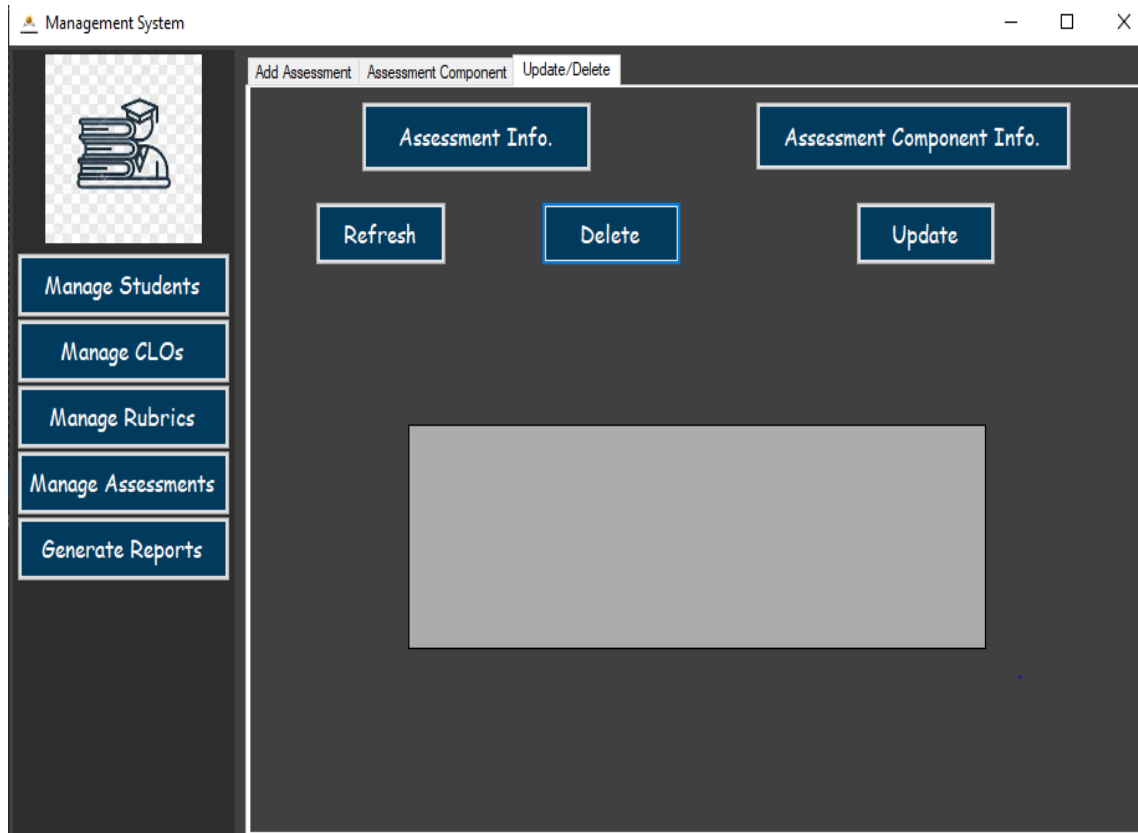


FIGURE 1.14: Update/Delete Assessment(Manage Assessment)

1.10.24 Description

In this page, CRUD are performed on assessment and assessment components. If we delete assessment ,then it first get delete from student result and then from assessment component. In assessment component,if we update component and its marks exceed assessment total marks then it show error of u have exceed assesment marks.

1.10.25 PDF Report(Generate Report)

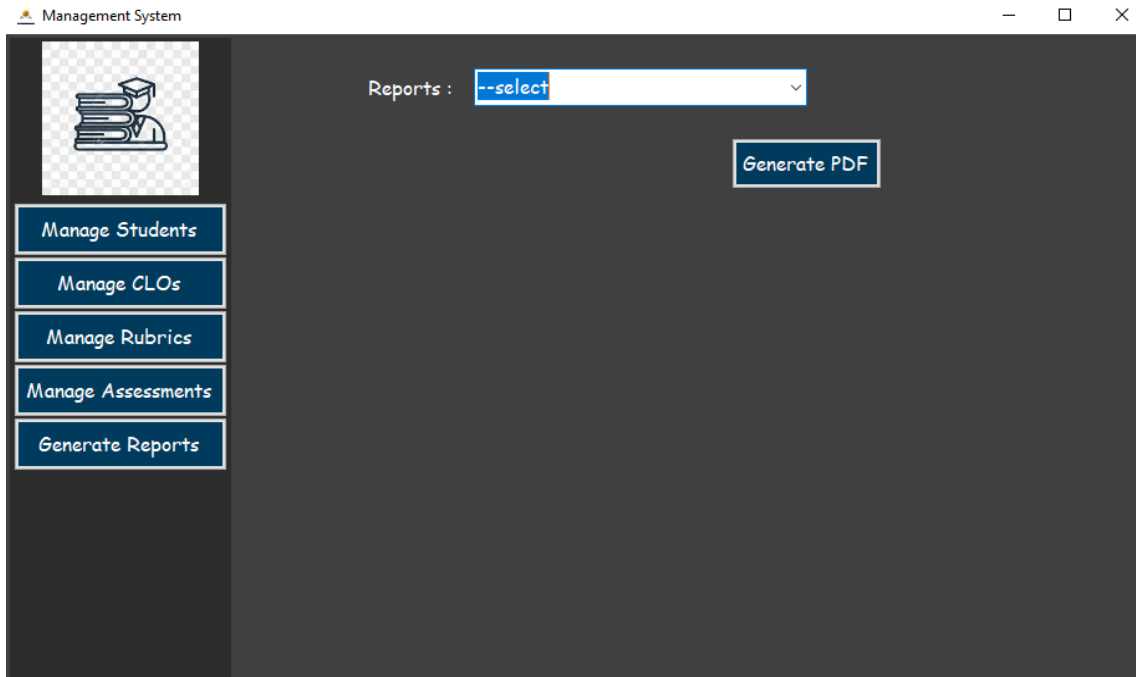


FIGURE 1.15: PDF Report(Generate Report)

1.11 Complete Working

In Manage student add student option, if he enter input in wrong pattern, it show error of wrong input pattern. As if user enter info in correct pattern and click add button, data from with textboxes is collected and then store in ProjectB database table Student. In student attendance, StudentId combo box shows those student ids whose status is active, AttendanceId combo shows attendance date and when it click add button, it get attendance status and assign it its appropriate id from Lookup table. In class attendance, it simple add date and store it in ClassAttendance table. In student result, it take assessment component and rubric measurement id and when add button clicked, it get assessment component id and rubric id and store it in StudentResult Table. CRUD operations are performed in such a way that if we delete a student, as student table id key is being used in StudentAttendance table and StudentResult table, it also get deleted from these both tables.

In Manage Clo add clo option, user simply add clo and store it in Clo table. CRUD operations are performed accurately. As Clo key is used in rubric and rubric key is used in rubric level and assessment component and their keys are used in student result. So simply it first get deleted from student result then from rubric level, assessment component and then from rubric and then from clo.

In Manage Rubric add rubric option, one clo can get multiple rubrics so it select clo and then give it rubric and store it in Rubric table. In rubric level, it assign measurementlevel to the rubrics. CRUD operations are performed in such a way that rubric id is used in rubric level and assessment component and their keys are used in StudentResult table. So first it get delete from student result, then from assessment component, rubric level and then from rubric.

In Manage Assessment add assessment option, it select title ,rubric id and then store it in Assessment table. In assessment component option, it simple add marks to the component of the assessment and if total marks get greater than assessment total marks, it show validation of u have exceed the marks. CRUD are performed in such a way that assessment component marks can never get greater than assessment and if we delete assessment,it firstly get deleted from StudentResult table and then from AssessmentComponent table and then from assessment table.